



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/624,200

07/22/2003

Philip W. Dalrymple III

MDTI 2 00002 US

7730

7590

06/28/2006

Thomas E. Kocovsky, Jr.
FAY, SHARPE, FAGAN, MINNICH & McKEE, LLP
Seventh Floor
1100 Superior Avenue
Cleveland, OH 44114-2518

EXAMINER

PADMANABHAN, KAVITA

ART UNIT

PAPER NUMBER

2161

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,200

Applicant(s)

DALRYMPLE ET AL.

Examiner

Kavita Padmanabhan

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-4 and 6-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claim 5 has been canceled.
2. Claims 1-4 and 6-21 are pending.
3. Claims 1-4 and 6-21 are rejected.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
6. **Claims 1-3, 6-7, 9-14, and 16-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shen** (US 6,611,850) **in view of Steele et al.** (US 2003/0212716, hereinafter

Art Unit: 2161

“Steele”), and **further in view of Applicant’s Admitted Prior Art** (applicant’s specification, pages 1-6, hereinafter “AAPA”).

In regards to **claim 1, Shen** teaches creating a backup of one or more storage media that store files associated with the application program to be restored (**Shen; col. 14, lines 52-53**), creating an initial application program backup of the application program including backing up information associated with the application program including at least files associated with the application program, said information associated with the application program being identified in a backup database (**Shen; col. 11, line 64 – col. 12, line 32**), periodically inventorying the one or more storage media to detect a change in the information associated with the application program (**Shen; col. 16, lines 3-6**), responsive to a detected change, creating an update application program backup of the application program including backing up the information associated with the application program (**Shen; col. 16, lines 12-18**), and restoring the application program to a state corresponding to a selected creation date by copying information contained in an application program backup having the selected creation date onto the one or more storage media without otherwise modifying or affecting the operating system and other application programs (**Shen; col. 19, lines 57-62; col. 20, lines 6-19**).

Shen does not expressly teach the backup being an image backup or the file being backed up and restored being an application program including an application program configuration, the application program associated with a computer that includes an operating system with a common applications registry.

Steele teaches creating an image backup of storage media (**Steele; par [0055], lines 4-7**).

AAPA teaches a common registry maintained by the operating system that contains parameters, settings, etc for program applications (AAPA; p2, line 30 – p3, line 15).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to create the backup of the storage media of Shen as image backups to allow integrity checks and routine maintenance to be performed on the backup data (Steele, par [0059], lines 8-18) and, moreover, to perform the backup/restoration method of Shen in an environment such as that taught by AAPA, since a common application registry provides the admitted well known advantage of saving disk space and reducing file allocation table size and complexity (AAPA; p3, lines 11-15).

In regards to **claim 2, Shen, Steele, and AAPA** teach the method as set forth in claim 1, wherein the creating of an update application program backup does not overwrite the initial application program backup or any previous update application program backup (Shen; col. 16, lines 63-67).

In regards to **claim 3, Shen, Steele, and AAPA** teach the method as set forth in claim 2, wherein each application program backup is dated with a creation date (Shen; col. 16, lines 51-59).

In regards to **claim 6, Shen, Steele, and AAPA** teach the method as set forth in claim 1, wherein the restoring further includes:

Art Unit: 2161

- prior to the copying of information contained in the application program backup, copying the image backup onto the one or more storage media (**Shen, col. 14, lines 51-52; Steele, par [0055], lines 4-11; image backup can serve as a baseline before applying the application program backup**).

In regards to **claim 7, Shen, Steele, and AAPA** teach the method as set forth in claim 1, further including:

- responsive to a detected change, categorizing the detected change as one of normal and suspicious (**Shen, col. 20, lines 42-50 – modification triggers a backup, and at that point it is determined whether the file is corrupted, so obviously determining whether the modification is acceptable/normal or corrupt/suspicious**); and
- responsive to a suspicious detected change, notifying a human of the suspicious detected change (**Shen; col. 15, lines 41-46 –obvious that an alert could be displayed when a backup is performed after a modification**).

In regards to **claim 9, Shen, Steele, and AAPA** teach the method as set forth in claim 1, further including:

- repeating the steps of creating an initial application program backup, periodically inventorying the one or more storage media to detect a change in the information associated with the application program, and creating an update application program backup responsive to a detected change for at least a second application program (**refer**

to citations given for claim 1, and also Shen, Fig. 5 and Fig. 6 – process is repeated for all the target files selected).

In regards to **claim 10, Shen, Steele, and AAPA** teach the method as set forth in claim 1, wherein the step of periodically inventorying the one or more storage media to detect a change in the information associated with the application program is performed responsive to a regular operation of the computer (**Shen; col. 15, lines 66-67; col. 16, lines 3-6**).

In regards to **claim 11, Shen, Steele, and AAPA** teach the method as set forth in claim 1, wherein the information associated with the application program identified in the backup database includes information stored in a flash interface memory, and wherein:

- the step of periodically inventorying further includes detecting a change in contents of the flash interface memory which pertain to the application program (**Shen; col. 16, lines 3-6; col. 22, lines 25-31, 38-41**); and
- the step of creating an update application program backup further includes recording the contents of the flash interface memory which pertain to the application program (**Shen; col. 11, lines 4-6; col. 22, lines 25-31, 38-41**).

In regards to **claim 13, Shen, Steele, and AAPA** teach the method as set forth in claim 1, further including:

- transferring the application program including the application program configuration to a second computer by copying information contained in an application program backup

onto the one or more storage media that are accessible by the second computer (**Steele; Fig. 9A and Fig. 9B; par [0055], lines 11-14; par [0056], line 2 – obvious that the backups could be stored on a storage device that is accessible by other computers).**

Claim 18 is rejected with the same rationale given for claim 1 (wherein the backed up files include all the information needed to restore the application program and its associated configuration, since the associated configuration information can obviously also be backed up, as explained with regards to claim 1, above).

In regards to **claim 12, Shen, Steele, and AAPA** teach the method as set forth in claim 18, wherein the stored information pertaining to the application program and its configuration identified in the application program backup database includes entries of a common applications registry (**AAPA, p2, line 30 – p3, line 3; Shen, col. 11, line 64 – col. 12, line 32 – obvious that the associated files in the common application registry could also be selected as target files to be monitored and backed up periodically).**

Claim 19 is rejected with the same rationale given for claim 9.

Claim 14 is rejected with the same rationale given for claim 12.

Claim 16 is rejected with the same rationale given for claim 6.

In regards to **claim 17, Shen, Steele, and AAPA** teach the system as set forth in claim 14, wherein the computer is connected to a server system, and the application program backup is stored on the server system (**Shen; col. 11, lines 14-18**).

Claim 20 is rejected with the same rationale given for claim 7.

Claim 21 is rejected with the same rationale given for claim 11.

7. **Claims 4 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shen in view of Steele, further in view of AAPA, further in view of Devarakonda et al.** (US 2003/0225801, hereinafter “Devarakonda”), **and further in view of Green et al.** (US 2003/0220948, hereinafter “Green”).

In regards to **claim 4, Shen, Steele, and AAPA** teach the method as set forth in claim 3.

Shen, Steele, and AAPA do not expressly teach deleting an application program backup having an oldest creation date of a plurality of application program backups responsive to both of a number of application program backups exceeding a selected number, and a time interval between a present date and the oldest creation date exceeding a selected time interval.

Devarakonda teaches attributes specifying the length of time that data should be kept and the number of versions of data that should be maintained as well as policies prescribing actions that should be taken on data when the time has elapsed or the number of versions is exceeded (**Devarakonda; par [0029], lines 7-16**).

Green teaches deleting the oldest backup when a predetermined number of members of the collection of backups is exceeded (**Green; par [0015], lines 9-19; par [0039], lines 17-19**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the method of Shen, Steele, and AAPA incorporating the functionality taught by Devarakonda and Green, thereby allowing policies to be set for the maintenance of the backup data (**Devarakonda; par [0029], lines 2-4, 9-11**) and to free up storage space (**Green; par [0033], lines 10-18**).

Claim 15 is rejected with the same rationale given for claim 4.

8. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Shen in view of Steele, further in view of AAPA, and further in view of Otsuka et al.** (US 6,564,235, hereinafter "Otsuka").

In regards to **claim 8**, **Shen, Steele, and AAPA** teach the method as set forth in claim 7.

Shen, Steele, and AAPA do not expressly teach responsive to a suspicious detected change, waiting to receive an approval from the human before creating the update application program backup.

Otsuka teaches a user performing an approval operation regarding a backup (**Otsuka; col. 32, lines 57-63**).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to implement the method of Shen, Steele, and AAPA incorporating the user

interactivity functionality of Otsuka, whereby when the alert is output on the display, as taught by Shen, the user would be able to approve the backup to continue, thereby providing the advantage of allowing the user to have control over the operations of the backup process (Otsuka; col. 32, lines 55-63).

Response to Amendment

9. Applicant's amendments filed 4/7/06 with respect to the 35 U.S.C. 112, 2nd paragraph rejection of claim 19 has been fully considered. The rejection has been withdrawn accordingly.

Response to Arguments

10. Applicant's arguments filed 4/7/06 with respect to the prior art rejections of the claims have been fully considered but they are not persuasive.

The applicant argues at page 12 of applicant's remarks that Shen does not disclose or fairly suggest backing up information pertaining only to an application program so as to provide targeted application program backup and the ability to restore the application program together with its configuration at the time of backup without altering other application programs. The examiner respectfully disagrees. The examiner first notes that claim 1, for example, does not recite backing up information pertaining *only* to an application program or restoring the application program *together with its configuration*. Furthermore, the recitation "an application program including an application program configuration, the application program associated with a computer that includes an operating system with a common applications registry" has not been given patentable weight because the recitation occurs in the preamble. A preamble is

Art Unit: 2161

generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Also, the examiner asserts that Shen does indeed teach restoring the application program without otherwise modifying or affecting the operating system and other application programs in that only the targeted files are restored without re-installing the operating system or overwriting any other application program files (Shen; col. 19, lines 57-62; col. 20, lines 6-19).

The applicant argues at page 13 of applicant's remarks that Shen does not teach a database containing information associated with the application program so as to enable targeted backup of the application program. The examiner respectfully disagrees and refers the applicant to col. 11, line 64 – col. 12, line 32 of Shen and also Figure 1 of Shen describing and depicting a backup database meeting the limitations of the claim.

In response to the applicant's argument at page 13 of applicant's remarks regarding the common applications registry, the examiner again notes that this limitation is in the preamble and therefore has not been given patentable weight.

The applicant argues at page 14 of applicant's remarks that Shen does not teach recording the contents of a flash interface memory. The examiner respectfully disagrees and refers the applicant to Shen, col. 22, lines 25-31 and 38-41.

The applicant argues at page 14 of applicants remarks, with respect to claim 14, that choosing to back up the common registry file would not provide targeted application program

Art Unit: 2161

backup and restore because the common application registry contains entries for many application programs and not only the targeted application. The examiner respectfully disagrees. The examiner asserts that by copying the application registry file, the entries pertaining to the application program would indeed be copied, which meets the limitations of the claim, as presently recited. The claim does not require that only the entries corresponding to one specific application program are to be copied. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant argues at page 15 of applicant's remarks that the cited references do not teach recording operations relating to the contents of a flash interface memory. The examiner respectfully disagrees and refers the applicant to Shen, col. 22, lines 25-31 and 38-41.

The applicant argues at page 16 of applicant's remarks, with respect to claim 18, that Shen does not suggest the stored information identified by the application program backup database being complete information sufficient for a complete restoration of the application together with its configuration. The examiner respectfully disagrees. The examiner asserts that Shen, at col. 19, lines 23-37 and 57-62 and at col. 20, lines 6-19, together with the AAPA, whereby configuration information can obviously also be selected for backing up and restoring, clearly suggests that all the information necessary for a restore of the selected application program is present.

The applicant also argues at page 16 of applicant's remarks, with respect to claim 12, that attempting to apply Shen to perform application program backup including entries of the common application registry would fail because Shen teaches backing up the entire targeted file

Art Unit: 2161

is any change has been made to that file. The applicant goes on to allege that given this scenario, during restore the entire common application registry would be overwritten by Shen, thus overwriting entries for application programs other than the application program being restored. The examiner respectfully disagrees with the applicant's arguments. The examiner asserts that the cited references teach the limitations of the claim, as presently recited. For example, in Shen it is obviously possible to select/target all files for back up and subsequently to restore all files. In this scenario, the examiner asserts that the limitations of the claims would be met, in that the application program and its associated configuration would be restored without affecting files that were not identified for back up/restore (since all the files were identified). As another example, it is obviously possible that only one application program exists on the system, in which case the limitations of the claim are also met. Furthermore, the phrase "configured to" is broad language, and any system that allows, i.e. does not prohibit, the functions following such a phrase from being performed is interpreted to meet the language of the claim.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2161

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kavita Padmanabhan** whose telephone number is **571-272-8352**. The examiner can normally be reached on Monday-Friday, 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kavita Padmanabhan
Assistant Examiner
AU 2161



June 16, 2006



UYEN LE
PRIMARY EXAMINER